

Wage Rate Index - Year 2012

(Base: fourth quarter 2011=100)

1. Introduction

This issue of 'Economic and Social Indicators' presents wage rate indices for the four quarters and year 2012 using the fourth quarter 2011 as base period. The series also publishes the indices according to the revised national classification of economic activities based on the International Standard Industrial Classification of All Economic Activities (ISIC), Rev.4 of 2007. The change in industrial classification of economic activities is given at Annex 1.

Previous published series were computed using third quarter of 2006 as base. A review of the weights was necessary to reflect changes in the industrial and occupational structure of the economy.

The wage rate index measures changes in the price of labour i.e, changes in the average rates actually paid by employers to their employees for work during normal working hours. The methodology used for computing the index is given in the technical note at Annex 2.

2. Wage Rate Index, 1st to 4th Quarter 2012

2.1 Main movements

The wage rate index (Base = fourth quarter 2011) increased continuously from the fourth quarter 2011 to the fourth quarter 2012 as follows:

Quarter	Index	% Change in index	Change in index point
Q ₄ 2011	100.0	-	-
Q ₁ 2012	103.0	3.0	3.0
Q ₂ 2012	103.5	0.5	0.5
Q ₃ 2012	104.5	1.0	1.0
Q ₄ 2012	104.7	0.2	0.2

The evolution of the quarterly indices by industry group is presented at Table 1.

2.2 Changes by industry

Table 2 gives the percentage change in the quarterly wage rate index by industry group. Main increases were observed in: 'Water supply, sewerage, waste management and remediation activities'(+6.5%), 'Education' (5.8%), 'Public administration and defence, compulsory social security' (5.4%), 'Human health and social work activities' (5.1%) in quarter 1, and 'Agriculture, forestry and fishing' (+23.1%) in quarter 3.

Decreases were noted in some industry groups over the quarters, the main ones being in 'Agriculture, forestry and fishing' (-11.5%) in quarter 1 and 'Water supply, sewerage, waste management and remediation activities' (-3.1%) in quarter 2.

3. Wage Rate Index, Year 2012

The wage rate index worked out as the average of the quarterly indices, increased by 4.7 % to reach 103.9 in 2012 from 99.2 in 2011.

The wage rate index for the General Government sector which comprises Ministries, Government departments and agencies operating under them, municipalities, district councils and Rodrigues Regional Assembly increased by 6.1% to reach 106.1 in 2012. The General Government sector which accounts for around 32% of the total weight of the wage rate index contributed 1.9 index points to the increase of 4.7 index points in the overall index for 2012.

The wage rate index for the private sector and public enterprises which together account for some 68% of the weights, increased by 4.1% in 2012.

4. Past trend

Table 3 presents the quarterly and yearly indices from 2007 to 2012. Indices for years 2007 to 2011 have been worked out using third quarter 2006 as base. As from 2012 the base period used is fourth quarter 2011.

The series are not strictly comparable because of different base period and weighting patterns. However to enable comparison between the two series, chain link series with fourth quarter 2011 as base has been worked out and is given in Table 4.

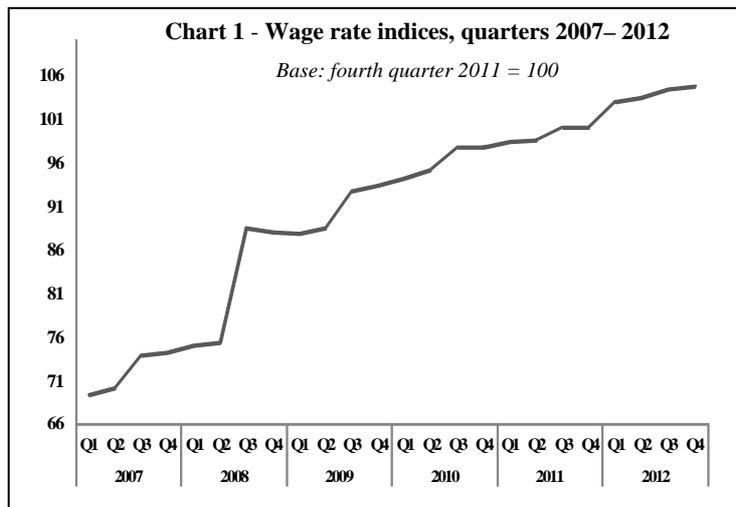


Chart 1 shows the movement of the quarterly indices covering the period 2007 to 2012 with fourth quarter 2011 as base period. It indicates a general upward movement in the index throughout the years, with a major increase in the third quarter 2008 following salary revision in the Government sector.

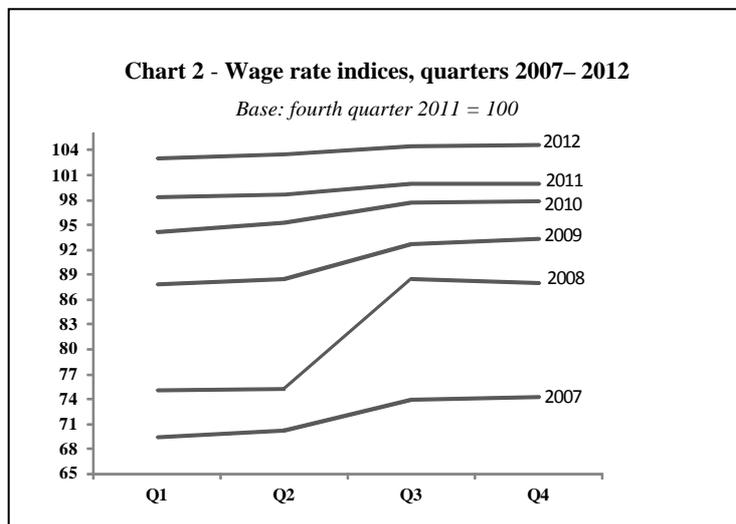


Chart 2 shows the quarterly trend of the indices for years 2007 to 2012. From 2007 to 2009, the highest increase in wage rate index occurred in the third quarter, mainly explained by salary increase in the Government sector and the seasonal wage increase in the sugar industry. Thereafter, a smoother trend in the quarterly wage rate indices is observed as salary increase in the Government sector was effected in quarter 2 of year 2010 and quarter 1 as from year 2011.

Statistics Mauritius

Ministry of Finance and Economic Development
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Contact persons:

- (1) Ms. S. Nunhuck (Statistician)
 - (2) Ms. F. Moserdee (Senior Statistical Officer)
- Labour Unit
Statistics Mauritius
LIC Centre
Port-Louis
Tel: 212 2316/17 Fax: 211 4150
Email: cso_labour@mail.gov.mu

Table 1: Wage Rate Index, 2012¹*(Base: fourth quarter 2011=100)*

Industry group	Weight	2012 ¹				
		Q1	Q2	Q3	Q4	Year
Agriculture, forestry and fishing	32	88.5	87.7	108.0	105.4	97.4
Mining and quarrying	3	102.6	103.3	102.5	102.4	102.7
Manufacturing	121	102.8	103.5	103.6	103.8	103.4
<i>Of which Sugar</i>	4	107.7	108.8	116.7	113.4	111.7
<i>Food (excluding sugar)</i>	19	103.7	106.8	101.6	101.1	103.3
<i>Textiles</i>	48	101.3	101.3	102.8	105.0	102.6
Electricity, gas, steam and air conditioning supply	15	101.6	101.5	100.9	101.0	101.3
Water supply, sewerage, waste management and remediation activities	7	106.5	103.2	104.8	106.0	105.1
Construction	50	102.8	103.6	104.1	104.2	103.7
Wholesale and retail trade; repair of motor vehicles and motorcycles	74	102.9	103.2	103.4	103.5	103.3
Transportation and storage	67	103.5	103.6	104.7	105.7	104.4
Accommodation and food service activities	70	102.4	103.7	103.3	104.2	103.4
Information and communication	39	102.4	102.1	102.9	103.2	102.7
Financial and insurance activities	77	100.5	100.5	100.5	101.1	100.7
Real estate activities	3	104.6	104.6	105.0	105.1	104.8
Professional, scientific and technical activities	33	100.8	101.3	101.3	101.7	101.3
Administrative and support service activities	38	100.3	100.8	101.2	102.4	101.2
Public administration and defence; compulsory social security	190	105.4	106.2	107.3	107.5	106.6
Education	107	105.8	106.7	106.5	105.1	106.0
Human health and social work activities	62	105.1	105.5	107.0	107.1	106.2
Arts, entertainment and recreation	9	101.0	101.2	102.4	101.8	101.6
Other services	3	103.6	103.9	105.4	104.3	104.3
All sectors	1000	103.0	103.5	104.5	104.7	103.9
<i>of which General Government²</i>	319	104.9	105.8	106.8	106.8	106.1

¹ Provisional² Ministries, government departments and agencies operating under them; municipalities; district councils and Rodrigues Regional Assembly

Table 2 - Percentage change from previous quarter by industry group and contribution of industry groups to overall change in index, Q1 to Q4 2012

(Base: fourth quarter 2011=100)

Industry group	Weight	2012 ¹							
		% change in index				Contribution to change in overall index point			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	32	-11.5	-0.9	23.1	-2.4	-0.3	0.0	0.6	-0.1
Mining and quarrying	3	2.6	0.7	-0.8	-0.1	0.0	0.0	0.0	0.0
Manufacturing	121	2.8	0.7	0.1	0.2	0.3	0.1	0.0	0.1
<i>Of which Sugar</i>	4	7.7	1.0	7.3	-2.8	0.0	0.0	0.0	0.0
<i>Food (excluding sugar)</i>	19	3.7	3.0	-4.9	-0.5	0.1	0.1	-0.1	0.0
<i>Textiles</i>	48	1.3	0.0	1.5	2.1	0.1	0.0	0.2	0.2
Electricity, gas, steam and air conditioning supply	15	1.6	-0.1	-0.6	0.1	0.0	0.0	0.0	0.0
Water supply, sewerage, waste management and remediation activities	7	6.5	-3.1	1.6	1.1	0.1	0.0	0.0	0.0
Construction	50	2.8	0.8	0.5	0.1	0.2	0.0	0.0	0.0
Wholesale and retail trade; repair of motor vehicles and motorcycles	74	2.9	0.3	0.2	0.1	0.2	0.0	0.0	0.0
Transportation and storage	67	3.5	0.1	1.1	1.0	0.2	0.0	0.1	0.1
Accommodation and food service activities	70	2.4	1.3	-0.4	0.9	0.2	0.1	0.0	0.1
Information and communication	39	2.4	-0.3	0.8	0.3	0.1	0.0	0.0	0.0
Financial and insurance activities	77	0.5	0.0	0.0	0.6	0.1	0.0	0.0	0.1
Real estate activities	3	4.6	0.0	0.4	0.1	0.0	0.0	0.0	0.0
Professional, scientific and technical activities	33	0.8	0.5	0.0	0.4	0.0	0.0	0.0	0.0
Administrative and support service activities	38	0.3	0.5	0.4	1.2	0.0	0.0	0.0	0.0
Public administration and defence; compulsory social security	190	5.4	0.8	1.0	0.2	1.0	0.2	0.2	0.0
Education	107	5.8	0.9	-0.2	-1.3	0.6	0.1	0.0	-0.1
Human health and social work activities	62	5.1	0.4	1.4	0.1	0.3	0.0	0.1	0.0
Arts, entertainment and recreation	9	1.0	0.2	1.2	-0.6	0.0	0.0	0.0	0.0
Other services	3	3.6	0.3	1.4	-1.0	0.0	0.0	0.0	0.0
All sectors	1000	3.0	0.5	1.0	0.2	3.0	0.5	1.0	0.2
<i>of which General Government</i>	319	4.9	0.9	0.9	0.0	1.6	0.3	0.3	0.0

¹ Provisional

² Ministries, government departments and agencies operating under them; municipalities; district councils and Rodrigues Regional Assembly

Table 3: Quarterly and Yearly Wage Rate Index, 2007-2012¹

Year	Quarterly index				Yearly index
	Q1	Q2	Q3	Q4	
<i>(Base: third quarter 2006=100)</i>					
2007	101.1	102.2	107.6	108.0	104.7
2008	109.2	109.7	128.8	128.1	119.0
2009	128.0	128.8	135.0	135.9	131.9
2010	137.2	138.6	142.2	142.4	140.1
2011	143.3	143.5	145.6	145.6	144.5
<i>(Base: fourth quarter 2011=100)</i>					
2012 ¹	103.0	103.5	104.5	104.7	103.9

Table 4: Quarterly and Yearly Wage Rate Index, 2007 - 2012¹*(Base: fourth quarter 2011=100)*

Year	Quarterly index				Yearly index	% change in yearly index
	Q1	Q2	Q3	Q4		
2007	69.4	70.2	73.9	74.2	71.9	-
2008	75.0	75.3	88.5	88.0	81.7	13.6
2009	87.9	88.5	92.7	93.3	90.6	10.9
2010	94.2	95.2	97.7	97.8	96.2	6.2
2011	98.4	98.6	100.0	100.0	99.2	3.1
2012 ¹	103.0	103.5	104.5	104.7	103.9	4.7

¹ Provisional

Change in Industrial Classification

As from 2012, the wage rate index is produced based on the National Standard Industrial Classification of Economic Activities (NSIC), Rev 2, an adapted version of the International Industrial Classification of Economic Activities (ISIC), Rev 4 of the United Nations. The NSIC Rev 2 replaces the NSIC Rev 1 which is an adaptation of ISIC Rev 3.

The changes in the classification of the economic activities at the level of sectors are given below.



Technical Note

Methodology used for the compilation of the Wage Rate Index

1. Definition

The Wage Rate Index (WRI) measures changes in the price of labour, i.e. changes in the average rates actually paid by employers to their employees for work during normal working hours.

2. Approach adopted

To show genuine changes in the price of labour, it would have been necessary for wages of specific workers at specific establishments to be measured over time. Since this is not possible, the next best approach has been adopted, that is, to follow changes in the wages of groups of employees performing the same jobs. This gives a measure of changes in wage rates of specific occupations but has the following limitations:

- (i) any changes in the mix of employees within the selected occupations is bound to affect the calculated rates and hence the corresponding sectoral indices. Such changes occurs, for example, with a new intake of employees in a specific group - when the wages of the new recruits pull down the average wages for the whole group from one period to the next.
- (ii) wage adjustments resulting from changes in the tasks associated with a particular occupation, which cannot be separated from pure price changes of labour.
- (iii) it is difficult to separate the effects of productivity from the overall change.

3. Coverage

The wage rate index is based on wage rates applicable in 'large' establishments only. Employment in these establishments accounted for around 54% of total employment in year 2012. 'Large' establishments comprise sugar cane plantations of 10 hectares or more; tea plantations of 2 hectares or more; other agricultural and non-agricultural establishments having 10 or more employees as well as General Government Services, i.e. ministries, government departments and agencies operating under them; municipalities; district councils and Rodrigues Regional Assembly.

Time-rated as well as piece-rated wage earners and salaried employees are covered. Apprentices, workers on probation, part-time workers and employees working on a temporary basis are excluded.

4. Calculating the Wage Rate Index

A Laspeyres formula is used. The occupational structure is held constant with reference to the base period of the index, i.e. December 2011. The relative changes in average wage rates are measured at the occupational level and these changes are then weighted to give a combined measure of the change. The following formula is used

$$I_t = \frac{\sum w_i (R_i^t / R_i^o)}{\sum w_i} \times 100$$

where I_t = index for quarter t compared to base period o

$w_i = N_i^o R_i^o$ which represents the total wages paid to all employees in the i th occupation in base period, December 2011

R_i^o = wage rate of occupation i in base period, December 2011

R_i^t = wage rate of occupation i in quarter t

The index is first calculated for each industry group and the overall index (covering all industry groups) is computed as a weighted average of the individual industry group indices.

5. Reference period

The base period for the index is December 2011 as from the first quarter of 2012. The wage rate indices for the first, second, third and fourth quarters of 2007 and 2008 are based on wage rates applicable during the months of February, May, August and November respectively. As from 2009, the wage rate indices for the first to fourth quarter are based on wage rates applicable during the months of March, June, September and December respectively.

6. Weights

Two sets of weights are used:

(i) The weights used for each occupation within a given industry group are based on the distribution of wages by occupation as obtained from the Population Census 2011.

(ii) The weights for each industry group are based on the distribution of earnings by industry group as obtained from the Survey of Employment and Earnings carried out in around 2,700 'large' establishments in March 2011.

7. Wage rates used

The wage/salary rates of specific occupations, used in the calculation of the index, are the rates paid for normal time work, comprising basic wages and salaries, cost of living allowances and other guaranteed and regular allowances paid at the end of each pay period. Overtime payments are therefore excluded.